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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yinjun Zhu

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EXAMINER

STEIN, JULIE E

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/724,773	Applicant(s) ZHU, YINJUN	
	Examiner Julie E. Stein, Esq.	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. In response to Applicant's arguments, on page 6, line 22 of the originally filed specification it clearly states that Figure 2 is a drawing of an existing system and as Figure 2 is based on Figure 1, Figures 1 and 2 should be labeled as Prior Art.

Specification

4. In response to the amendment of the specification, specifically, the amendment to page 1, the previous objection to the disclosure is withdrawn.

5. However, in the Brief Description of the Drawings, it appears to the Examiner that based on the description in the specification, Figures 1 and 2 should be labeled as Prior Art, as it appears that the network layouts shown are known in the art.

Appropriate correction is required.

Claim Objections

6. Claim 1 is objected to because of the following informalities: in line 3, LCS should be initially spelled out and then put in “()” before the acronym is used and in line 7, “visited” is missing before the second “LCS manager”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. In view of the amendments to the claims, the previous rejections of the claims under 35 U.S.C. 112, second paragraph, are withdrawn.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0229632 to Flynn et al. in view of U.S. Patent Application No. 2003/0196105 to Fineberg.

Flynn teaches all the steps/elements of independent claims 1 and 6, including a method and apparatus for providing a User Plane location based service to a roaming wireless device (abstract), comprising: (means for) establishing a roaming interface (paragraphs 8 to 10) between a home LCS manager of a home wireless carrier network (Id. and paragraph 38 to 39) and a visited LCS manager of a currently visited wireless

carrier network (paragraphs 8 to 10 and 40 to 41); and (means for) providing a message tunneling mechanism (paragraphs 42 to 43, Lr interface) to provide an uninterrupted communication path between a location service system (Id. and Figure 1) and a wireless device being located (Id.).

However, Flynn does not explicitly teach (means for) *directing IP connectivity* over said roaming interface between said home LCS manager and said LCS manager *through a firewall in said home wireless carrier network and through a firewall in said visited wireless carrier network*. But Flynn does teach that communication between the LCSs occurs on the Lr interface (paragraph 42) and that the LCSs may be GMLCs, which are described in more detail in 3GPP, which describes the UMTS standard (paragraph 66).

In addition Fineberg teaches a system and method to be used with both GPRS and UMTS, where a roaming user can remotely access protected intranets. See abstract. Fineberg further teaches in Figure 1, a plurality of remote users (105, 110, and 115) who are attempting to access corporations A and Bs' intranets. As the Legend in Figure 1 identifies, RU3 is a roaming user, SGSN3 is a serving GPRS support node, GGSN is a gateway GPRS support node, and various tunneling protocols are in use (see also par. 31 and the corresponding description of Figure 1). Fineberg also teaches that firewalls are well known (see pars. 3 to 4) and are used to protect remote access to VPN intranets, and that GGSNs, serving as gateways to global networks, authenticate users and then route traffic to the internet, using location dependent SGSNs (par. 11).

In view of these teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the taught method and apparatus of Flynn, which includes the recited location/LCS limitations of the claimed invention with the teachings of Fineberg (see above) to achieve Applicant's claimed invention, because Fineberg teaches the same functional concept as the claimed invention: a roaming user (Ru3), who connects to a wireless service (WSP-2), which then directs IP connectivity via a roaming interface (Gp to Gi) between two network nodes (SGSN3 & GGSN—LAS-A or LAS-B), through at least two firewalls (SGSN3 & GGSN & ISP-A or ISP-B), via a tunneling mechanism (L2TP) in order to streamline the process and reduce the use of network resources due to the location of roaming users (Fineberg, par. 6).

Flynn also teaches all the steps/elements of claims 2-5 and 7-10, except explicitly wherein the roaming wireless device being a mobile telephone, a PDA, a wireless email device, or a wireless device including a camera. However, Fineberg teaches that various well known wireless devices may be used with wireless networks, such as cellular telephones, laptops, and PDAs. See Fineberg, par. 20 (the Examiner is taking Official Notice that wireless devices with cameras are well known in the art). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any one of various well known wireless devices as taught by Fineberg or known in the art because, for example, they allow for additional functionality, such as a PDA allows the user to keep a calendar as well as use the device as a mobile phone.

Response to Arguments

10. With regard to the objection to the drawings, Applicant argues that Figures 1 and 2 are examples of the present invention, however, as evidenced by Figure 1 of Flynn, the Lr interface is a known signaling interface. Thus, while Applicant may be using Lr in a new way, *Figures 1 and 2*, as far as the Examiner can determine, do not show any new information. Therefore, they should be labeled Prior Art.

11. As for the rejection of “a location service system” under 112, second paragraph, the rejection has been withdrawn, however, it is noted that the rejection was not related to antecedent basis, the issue was that the “location service system” was not and is not being interpreted as having to be located in any particular location/part of the system because the claim language is not limiting.

12. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

13. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner is not relying on the primary reference for such motivation, but on the secondary reference, Fineberg. See rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 6,199,113 to Alegre et al. and 6,178,505 to Schneider et al. teach various methods and systems for controlling access to networks and U.S. Patent Application Publication No. 2004/0242238 to Wang et al. teaches a method, system and apparatus for providing locations services using IP connectivity.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JES



GEORGE ENG
SUPERVISORY PATENT EXAMINER